

Cowley County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

6/11/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 24 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Cowley County economy.¹

These 24 sectors have a total direct output of approximately **\$1.9 billion** and support **2,393 jobs** in Cowley County. Running the model for all 24 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Cowley County Economy						
Impact Type ²	Employment	% Employment	Total Value Added ³	Total Value Added % of Gross Regional Product ⁴	Output ⁵	Output % of Gross Regional Product
Direct Effect	2392.9	11.99%	\$604,074,006	34.87%	\$1,900,610,832	109.71%
Indirect Effect	1079.0	5.40%	\$77,035,031	4.45%	\$148,833,315	8.59%
Induced Effect	562.0	2.81%	\$32,659,129	1.89%	\$58,522,023	3.38%
Total Effect	4033.9	20.21%	\$713,768,166	41.20%	\$2,107,966,170	121.68%

As shown in the above table, agriculture, food, and food processing sectors support **4,034 jobs**, or **20.21%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$2.1 billion**, roughly **121.68% of the economy**.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 24 agriculture, food, and food processing sectors is approximately **\$713.8 million**, or **41.20% of the GRP**. This indicates that personal income, business income, and taxes generated by these sectors account for **41.20% of the total economy**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting:

http://www.implan.com/index.php?option=com_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value added = labor income + indirect business taxes + other property type income.

⁴ GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

⁵ Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **698 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Cowley County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	697.5	\$46,985,827
Animal, except poultry, slaughtering	639.8	\$434,983,803
Flavoring syrup and concentrate manufacturing	426.9	\$1,217,636,542
Support activities for agriculture and forestry	180.8	\$7,219,653
Grain farming	160.0	\$33,790,227
Wholesale trade	154.2	\$30,745,373
Landscape and horticultural services	139.0	\$5,127,990
Flour milling	95.1	\$127,873,757
Truck transportation	94.9	\$14,286,977
Insurance agencies, brokerages, and related activities	87.9	\$12,640,301

The flavoring syrup and concentrate manufacturing sector directly contributes approximately **\$1.22 billion** to the Cowley County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Flavoring syrup and concentrate manufacturing	426.9	\$1,217,636,542
Animal, except poultry, slaughtering	639.8	\$434,983,803
Flour milling	95.1	\$127,873,757
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	697.5	\$46,985,827
Grain farming	160.0	\$33,790,227
Wholesale trade	154.2	\$30,745,373
Rail transportation	43.3	\$20,397,130
Monetary authorities and depository credit intermediation	86.4	\$17,567,961
Oilseed farming	25.4	\$15,095,933
Truck transportation	94.9	\$14,286,977

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Cowley County economy.

All Agriculture, Food, and Food Processing Sectors		
Sector	Total Employment	Total Output
Oilseed farming	25.4	\$15,095,933.21
Grain farming	160.0	\$33,790,226.54
Vegetable and melon farming	0.2	\$24,098.76
Fruit farming	2.5	\$132,026.51
Tree nut farming	0.9	\$87,468.55
Greenhouse, nursery, and floriculture production	1.3	\$109,333.47
Cotton farming	16.2	\$2,476,121.94
All other crop farming	81.3	\$3,545,089.78
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	697.5	\$46,985,826.76
Dairy cattle and milk production	13.7	\$3,324,091.83
Poultry and egg production	0.7	\$352,304.65
Animal production, except cattle and poultry and eggs	9.6	\$691,510.83
Commercial logging	4.4	\$195,062.02
Commercial hunting and trapping	9.0	\$181,418.05
Flour milling	95.1	\$127,873,756.76
Confectionery manufacturing from purchased chocolate	2.8	\$939,505.57
Animal, except poultry, slaughtering	639.8	\$434,983,802.92
Bread and bakery product, except frozen, manufacturing	18.1	\$2,190,119.49
Frozen cakes and other pastries manufacturing	1.1	\$178,089.11
Flavoring syrup and concentrate manufacturing	426.9	\$1,217,636,541.99
Wineries	0.9	\$282,629.15
All other industrial machinery manufacturing	1.8	\$487,841.40
Veterinary services	44.8	\$3,920,043.18
Landscape and horticultural services	139.0	\$5,127,989.91

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Cowley County, the retail sector was omitted.